



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/642,063 | 08/18/2000 | Blake Lewis | 103.1033.01 | 6744 |

22883 7590 10/29/2002
SWERNOFSKY LAW GROUP PC
P.O. BOX 390013
MOUNTAIN VIEW, CA 94039-0013

EXAMINER

LE, MIRANDA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2177

DATE MAILED: 10/29/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

g

Office Action Summary

Application No.

09/642,063

Applicant(s)

LEWIS ET AL.

Examiner

Miranda Le

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 8, 10-16, 18, 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hitz et al. (US Patent No. 5,819,292).

Hitz anticipated independent claims 1, 12 by the following:

3. As per claim 1, Hitz teaches “a method of managing a file system for a file server ... receiving a file operation that signals a reservation operation for a file having a file size” at col. 5, line 61 – col. 6, line 10, col. 6, line 54 – col. 7, line 62;

“computing a number of blocks needed to be reserved to accommodate the file ...” at col. 6, lines 11-50, col. 18, lines 1-8;

“reserving a number unallocated blocks in the file system equal to the number of blocks needed to be reserved to accommodate the file ...” at col. 18, lines 25-41, col. 21, lines 15-24.

4. As per claim 12, Hitz teaches “a method of managing a file system for a file server...receiving a file operation that signals a reservation operation for a file for which reservation has already been performed,...reservation operation specifying a new file size different from a current file size for the file...” at col. 19, lines 21-41.

“comparing the current file size with the new file size...” at col. 18, lines 1-8;

“in the case that the current file size exceeds the new file size, releasing the remaining block reservations for the file; in the case that the new file size exceeds the current file size, reserving in the file system an additional number of unallocated blocks equal to a difference between a total number of direct and indirect blocks required by the new file size and a total number of direct and indirect blocks required by the current file size...” at col. 8, lines 8-56, col. 18, line 65 – col. 19, line 51, col. 21, line 59 – col. 22, line 16.

5. As per claims 2, 13, Hitz teaches “the file system uses a write anywhere file system layout ...” at col. 5, lines 49-59.

6. As per claims 3, 14, Hitz teaches “the file operation that signals the reservation operation is a zero length write request ...” at col. 22, lines 4-16.

7. As per claims 4, 15, Hitz teaches “the file operation that signals the reservation operation includes a parameter that specifies the file size...” at col. 5, line 61 – col. 6, line 53.

8. As per claim 5, Hitz teaches “the step of computing the number of blocks needed to be reserved to accommodate the file... determining a total number of direct and indirect blocks needed to accommodate the file size” at col. 8, lines 8-67;

“subtracting a total number of blocks already allocated for the file and a total number of cached unallocated blocks for the file from the total number of direct and indirect blocks needed to accommodate the file size...” at col. 5, lines 49-61, col. 7, line 5 - col. 8, lines 56.

9. As per claims 6, 16 Hitz teaches “setting/resetting a flag in an mode for the file that indicates blocks have been reserved for the file...” at col. 9, lines 26-65, col. 13, lines 3-20, col. 17, lines 41-55.

“incrementing/decrementing a reserved block count in a file system information block by the number of blocks needed, the reserved block count indicating how many unallocated blocks have been reserved for files in the file system...” at col. 14, lines 34-58, col. 16, line 42 – col. 17, lines 23.

11. As per claims 8, 18, Hitz teaches “the number of available blocks in the file system is determined by subtracting a number of allocated blocks, a number of cached unallocated blocks, and a number of reserved blocks from a total number of blocks in the file system, and adding a number of reserved cached unallocated blocks...” at col. 21, line 25 – col. 22, line 16.

13. As per claims 10, 20, Hitz teaches “the step of releasing reservation of blocks as those blocks are written to storage ...” at col. 13, lines 3-20, col. 17, lines 9-23, col. 17, lines 41-55.

14. As per claims 11, 21, Hitz teaches “the step of releasing reservation of blocks further comprises the step of decrementing a reserved block count in a file system information block by a number of released blocks, the reserved block count indicating how many unallocated blocks have been reserved for files in the file server...” at col. 17, lines 9-23.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7, 17, 9, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitz et al. (US Patent No. 5,819,292), as applied to claims 1-6, 8, 10-16, 18, 20-21, in view of Bendert et al. (5,237,682).

10. As per claims 7, 17, Hitz does not teach “the step of checking that a number of available blocks in the file system is greater than the number of blocks needed to be reserved to accommodate the file, wherein an error is returned in a case that the number of available blocks is less than the number of blocks needed...”. However, Bendert teach this at col. 17, lines 8-25, col. 19, lines 3-5.

Thus, it would have been obvious to one ordinarily skilled in the art at the time of the invention to include “the step of checking that a number of available blocks in the file system is greater than the number of blocks needed to be reserved to accommodate the file, wherein an error is returned in a case that the number of available blocks is less than the number of blocks needed” in order to manage file space and support the space management functions.

12. As per claims 9, 19, Hitz does not explicitly teach “the step of checking that the number of blocks needed to be reserved to accommodate the file does not exceed a remainder of a quota for an owner of the file, wherein an error is returned in a case that the number of blocks needed exceeds the remainder of the quota...”. However, Bendert teach this at col. 13, line 66 – col. 14, line 65, col. 18, line 21 – col. 19, line 11.

Thus, it would have been obvious to one ordinarily skilled in the art at the time of the invention to include “the step of checking that the number of blocks needed to be reserved to accommodate the file does not exceed a remainder of a quota for an owner of the file, wherein an error is returned in a case that the number of blocks needed exceeds the remainder of the quota” in order to provide interpretive request routine which are specifically designed to accomplish particular function for the file space management.

Art Unit: 2177

Conclusion

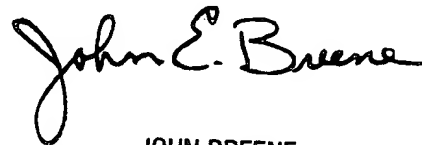
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (703) 305-3203. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax number to this Art Unit is (703) 746-7238.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Miranda Le
Patent Examiner-AU 2177
September 29, 2002



JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100